

Claims:

1. A method for an inverter, in particular for a solar inverter (1), for feeding energy produced by a d.c. voltage source (2) into an a.c. voltage grid (3), in which the energy produced by the d.c. voltage source (2) is chopped in the form of a pulse width modulation by a bridge inverter (5), by alternate switching of switching elements (6-9) connected in parallel and connected in series, and this chopped energy is transmitted via a transformer (18) which is connected between the switching elements (6-9) that are connected in series, whereupon the energy transmitted is rectified again and fed into the a.c. voltage grid (3) via a buck chopper (22), wherein, for a power adaptation, the switching times of the switching elements (6-9) of the bridge inverter (5) are controlled, or regulated, respectively, characterized in that the energy produced by the d.c. voltage source (2), is detected at intervals which are cyclical, in particular, or detected permanently, and in that the switching times of the switching elements (6-9) of the bridge inverter (5) are set as a function of the detected energy of the d.c. voltage source (2).

2. A method according to claim 1, characterized in that the dead time (42) of the switching elements (6-9) of the bridge inverter (5) is set as a function of the energy detected.

3. A method according to claim 1 or 2, characterized in that the period duration (55), or frequency, respectively, for the pulse width modulation for switching over the switching elements (6-9) of the bridge inverter (5) is set as a function of the energy detected.

4. A method according to one or several of claims 1 to 3, characterized in that the switching times of the switching elements (6-9) of the bridge inverter (5) are evaluated as a function of the energy detected and set automatically.

5. A method according to one or several of claims 1 to 4, characterized in that the switching times of the switching elements (6-9) of the bridge inverter (5) are calculated in dependence on the energy detected or are selected from a table with correspondingly stored data, in which table, e.g. corresponding values for the

switching times, in particular for the dead time (42) and/or for the pulse duration (55) or the frequency, respectively, are stored for the most varying mean values.

6. A method according to one or several of claims 1 to 5, characterized in that the switching times of the switching elements (6-9) of the bridge inverter (5) are set as a function of the mean value of the current flowing over the primary winding (19) of the transformer (18).

7. A method according to one or several of claims 1 to 6, characterized in that the switching elements (6-9) are activated at appropriately set points of time.

8. An inverter, in particular a solar inverter (1), for feeding energy produced by a d.c. voltage source (2) into an a.c. voltage grid (3), said inverter comprising a bridge inverter (5), a transformer (18), a rectifier (21), a back chopper (22) including a full bridge and an output filter (23), a control device (24) being provided for controlling the parameters of the inverter (1), characterized in that a device for de-

detecting the energy produced by the d.c. voltage source (2) is provided, which device is connected to the control device (24), and in that the bridge inverter (5) is designed for adapting the switching time, in particular the dead time (42), for switching over of the switching elements (6-9), and/or for adapting a pulse duration (55), or frequency, respectively, for the pulse width modulation as a function of the energy detected.

9. An inverter according to claim 8, characterized in that the device for detecting the energy produced by the d.c. voltage source (2) is formed by a current measurement device (26) on the primary side of the transformer (18).